Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 20040086880 A1

Using default format because multiple data bases are involved.

L4: Entry 1 of 6 File: PGPB May 6, 2004

PGPUB-DOCUMENT-NUMBER: 20040086880
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040086880 A1

TITLE: Method of producing nucleic acid molecules with reduced secondary structure

PUBLICATION-DATE: May 6, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Sampson, Jeffrey R.	San Francisco	CA	US	
Ach, Robert A.	San Francisco	CA	US	
Wolber, Paul	Los Altos	CA	US	

US-CL-CURRENT: 435/6; 514/44, 536/23.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D

☐ 2. Document ID: US 20020197618 A1

L4: Entry 2 of 6 File: PGPB Dec 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020197618
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020197618 A1

TITLE: Synthesis and amplification of unstructured nucleic acids for rapid sequencing

PUBLICATION-DATE: December 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Sampson, Jeffrey R.	Burlingame	CA	US	

US-CL-CURRENT: 435/6; 435/287.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw. D

☐ 3. Document ID: US 5925518 A

L4: Entry 3 of 6 File: USPT Jul 20, 1999

US-PAT-NO: 5925518
DOCUMENT-IDENTIFIER: US 5925518 A

TITLE: Nucleic acid primers for amplification of a mycobacteria RNA template

DATE-ISSUED: July 20, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Earle; Steven R.	Durham	NC		
Jacobson; Walter E.	Raleigh	NC		

US-CL-CURRENT: 435/6; 435/91.2, 536/24.3, 536/24.32

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw. D

☐ 4. Document ID: US 5665545 A

L4: Entry 4 of 6 File: USPT Sep 9, 1997

US-PAT-NO: 5665545
DOCUMENT-IDENTIFIER: US 5665545 A

TITLE: Terminal repeat amplification method

DATE-ISSUED: September 9, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Malek; Lawrence	Brampton			CA
Sooknanan; Roy	Toronto			CA

US-CL-CURRENT: 435/6; 435/91.2, 435/91.21, 435/91.5, 435/91.51, 435/91.52, 435/91.53

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw. D

☐ 5. Document ID: US 5654142 A

L4: Entry 5 of 6 File: USPT Aug 5, 1997

US-PAT-NO: 5654142
DOCUMENT-IDENTIFIER: US 5654142 A

** See image for Certificate of Correction **

TITLE: Method for nucleic acid amplification using inosine triphosphates to partially replace guanosine triphosphates in the synthesis of multiple RNA copies

DATE-ISSUED: August 5, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kievits; Tim	Vught			NL
Lens; Peter Franklin	Den Bosch			NL
Adriaanse; Henriette Maria Aleida	Boxmeer			NL

US-CL-CURRENT: 435/6; 435/91.2, 435/91.21

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 6. Document ID: EP 1103624 A1

L4: Entry 6 of 6 File: EPAB May 30, 2001

PUB-NO: EP001103624A1
DOCUMENT-IDENTIFIER: EP 1103624 A1
TITLE: POTENTIATED NUCLEIC ACID AMPLIFICATION METHOD

PUBN-DATE: May 30, 2001

INVENTOR-INFORMATION:

NAME	COUNTRY
ISHIZUKA, TETSUYA	JP
ISHIGURO, TAKAHIKO	JP
SAITOH, JUICHI	JP
SAKAI, TOMOMI	JP

ASSIGNEE-INFORMATION:

NAME	COUNTRY
TOSOH CORP	JP

APPL-NO: EP00931703
APPL-DATE: June 5, 2000

PRIORITY-DATA: JP15765399A (June 4, 1999)

INT-CL (IPC): C12 Q 1/68; C12 N 15/09; G01 N 33/542; G01 N 33/566
EUR-CL (EPC): C12Q001/68; C12Q001/68

ABSTRACT:

CHG DATE=20010704 STATUS=O> A method of amplifying a specific nucleic acid for assay of the specific nucleic acid anticipated in a sample by an RNA amplification procedure which comprises forming a double-stranded DNA which contains sequences complementary and homologous to the specific RNA sequence and has a promoter

sequence enabling transcription of the sequence by using the target RNA as the template and forming by using an RNA polymerase an RNA transcript which acts as the template for formation of a new single-stranded DNA, wherein in the RNA amplification procedure, inosine triphosphate is added in addition to adenosine triphosphate, uridine triphosphate, cytidine triphosphate and guanosine triphosphate to improve the efficiency of the amplification reaction.

Term	Documents
INOSINE	12540
INOSINES	162
TRIPHOSPHATE	21407
TRIPHOSPHATES	10392
(2 AND (INOSINE ADJ TRIPHOSPHATE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	6
(L2 AND INOSINE TRIPHOSPHATE).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	6

Display Format: - Change Format

Previous Page Next Page Go to Doc#

DNA **amplification** and RNA **amplification**;
addition of base pair-weakening ribonucleotide
PATENT ASSIGNEE: Akzo
PATENT INFO: AU 9344835 3 Mar 1994
APPLICATION INFO: AU 1993-44835 23 Aug 1993
PRIORITY INFO: EP 1992-202564 24 Aug 1992
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 1994-109842 [14]
AN 1994-06647 BIOTECHDS
AB The following are claimed: (1) a method for nucleic acid (NA) **amplification** which involves introducing nucleotides, during **amplification**, which weaken normal base-pairing; (2) a kit for **amplifying** NAs involving ribonucleotides which weaken normal base pairing; (3) a method for detecting **amplified** NAs where the NA is hybridized to a complementary oligonucleotide and is **amplified** ; and (4) a test kit for detection of NAs. The ribonucleotides are preferably **inosine-triphosphate** nucleotides and they partially substitute up to 50% of guanine-triphosphate nucleotides. Incorporation of the ribonucleotides during **amplification** prevents the formation of secondary structures in the **amplificate** . The efficiency of the **amplification** is therefore increased. An improved sensitivity during detection is also found by this method. In an example, vector plasmid pGem7z f(+), containing an insertion of 277 nt of the hepatitis C virus genome in its SmaI site, was used to generate a (+)RNA strand using phage T7 RNA-polymerase (EC-2.7.7.6). The **amplified** NA was electrophoresed and samples with differing amounts of NA were **amplified**. (14pp)

L5 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:428610 CAPLUS
DOCUMENT NUMBER: 121:28610
TITLE: Method for nucleic acid **amplification** involving ribonucleotide incorporation
INVENTOR(S): Kievits, Tim; Lens, Peter F.; Adriaanse, Henriette M. A.
PATENT ASSIGNEE(S): Akzo N. V., Neth.
SOURCE: Can. Pat. Appl., 12 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2104508	AA	19940225	CA 1993-2104508	19930820
ZA 9306016	A	19940310	ZA 1993-6016	19930817
EP 629706	A2	19941221	EP 1993-202455	19930820
EP 629706	A3	19971217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AU 9344835	A1	19940303	AU 1993-44835	19930823
AU 670804	B2	19960801		
JP 06165699	A2	19940614	JP 1993-207766	19930823
US 5654142	A	19970805	US 1995-403540	19950314
PRIORITY APPLN. INFO.:			EP 1992-202564 A	19920824
			US 1993-110919 B1	19930824

AB An improved method for the **amplification** of nucleic acid is characterized in that ribonucleotides are introduced during **amplification** that weaken normal base pairing. Preferably the ribonucleotides are inosinetriphosphate nucleotides which partly substitute guaninetriphosphate nucleotides normally present in the **amplification** reaction mixture The incorporation of nucleotides, during **amplification**, that weaken normal base pairing prevents

the formation of secondary structures in the **amplificate**. The efficiency of the **amplification** is thereby increased. The introduction, during **amplification**, of nucleotides that weaken normal base pairing also results in an improved sensitivity during detection of the **amplified** nucleic acid, when the detection method comprises the hybridization of the **amplified** nucleic acid to a complementary sequence. Part of the hepatitis C virus genome was **amplified** by NASBA using ITP:GTP of 1:3. Results showed that 102 mols. input of nucleic acid **amplified** in the presence of ITP gave a detectable band on gel electrophoresis, whereas nucleic acid **amplified** in the absence of ITP only gave a detectable signal when **amplification** was started with 104 mols. input.

Selective **amplification** of RNA utilizing the nucleotide analog dITP and Thermus thermophilus DNA polymerase.

AUTHOR: Auer T; Sninsky J J; Gelfand D H; Myers T W

CORPORATE SOURCE: Program in Core Research, Roche Molecular Systems, Alameda, CA 94501, USA.

SOURCE: Nucleic acids research, (1996 Dec 15) 24 (24) 5021-5. Journal code: 0411011. ISSN: 0305-1048.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199703

ENTRY DATE: Entered STN: 19970321
Last Updated on STN: 19980206
Entered Medline: 19970311

AB The ability to selectively **amplify** RNA in the presence of genomic DNA of analogous sequence is cumbersome and requires implementation of critical controls for genes lacking introns. The convenient approaches of either designing oligonucleotide primers at the splice junction or differentiating the target sequence based on the size difference obtained by the presence of the intron are not possible. Our strategy for the selective **amplification** of RNA targets is based on the enzymology of a single thermostable DNA polymerase and the ability to modulate the strand separation temperature requirements for PCR **amplification**. Following reverse transcription of the RNA by recombinant Thermus thermophilus DNA polymerase (rTth pol), the resulting RNAxDNA hybrid is digested by the RNase H activity of rTth pol, allowing the PCR primer to hybridize and initiate second-strand cDNA synthesis. Substitution of one or more conventional nucleotides with nucleotide analogs that decrease base stacking interactions and/or hydrogen bonding (e.g. hydroxymethyldUTP or dITP) during the first- and second-strand cDNA synthesis step reduces the strand separation temperature of the resultant DNAxDNA duplex. Alteration of the thermal cycling parameters of the subsequent PCR **amplification**, such that the strand separation temperature is below that required for denaturation of genomic duplex DNA composed of standard nucleotides, prevents the genomic DNA from being denatured and therefore **amplified**.

L5 ANSWER 9 OF 16 MEDLINE on STN

ACCESSION NUMBER: 95247017 MEDLINE

DOCUMENT NUMBER: PubMed ID: 7729673

TITLE: Cold-sensitive conditional mutations in Era, an essential Escherichia coli GTPase, isolated by localized random polymerase chain reaction mutagenesis.

AUTHOR: Lerner C G; Gulati P S; Inouye M

CORPORATE SOURCE: Department of Biochemistry, UMDNJ-Robert Wood Johnson Medical School, Piscataway 08854-5635.

CONTRACT NUMBER: GM12446 (NIGMS)
GM19043 (NIGMS)

SOURCE: FEMS microbiology letters, (1995 Mar 1) 126 (3) 291-8. Journal code: 7705721. ISSN: 0378-1097.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199505

ENTRY DATE: Entered STN: 19950608

PubMed ID: 9512564

TITLE: Inosine 5'-triphosphate can dramatically increase the yield of NASBA products targeting GC-rich and intramolecular base-paired viroid RNA.

AUTHOR: Nakahara K; Hataya T; Uyeda I

CORPORATE SOURCE: Department of Agrobiology and Bioresources, Faculty of Agriculture, Hokkaido University, Sapporo 060-8589, Japan.

SOURCE: Nucleic acids research, (1998 Apr 1) 26 (7) 1854-6.
Journal code: 0411011. ISSN: 0305-1048.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199805

ENTRY DATE: Entered STN: 19980609
Last Updated on STN: 19980609
Entered Medline: 19980528

AB Nucleic acid sequence-based **amplification** (NASBA) according to the standard protocol failed to **amplify** cRNA of viroids, probably because of their GC-rich and intramolecular base-paired structure. However, NASBA in the presence of inosine 5'-triphosphate successfully **amplified** the cRNAs to viroids in total nucleic acid extracts from citrus plants. As sequence specificity of the cRNA to viroids was confirmed by northern analysis, the **amplification** and fidelity of cRNAs are sufficient for the sensitive and specific detection of viroids.

PubMed ID: 9512564

TITLE: Inosine 5'-triphosphate can dramatically increase the yield of NASBA products targeting GC-rich and intramolecular base-paired viroid RNA.

AUTHOR: Nakahara K; Hataya T; Uyeda I

CORPORATE SOURCE: Department of Agrobiology and Bioresources, Faculty of Agriculture, Hokkaido University, Sapporo 060-8589, Japan.

SOURCE: Nucleic acids research, (1998 Apr 1) 26 (7) 1854-6.
Journal code: 0411011. ISSN: 0305-1048.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199805

ENTRY DATE: Entered STN: 19980609
Last Updated on STN: 19980609
Entered Medline: 19980528

AB Nucleic acid sequence-based **amplification** (NASBA) according to the standard protocol failed to **amplify** cRNA of viroids, probably because of their GC-rich and intramolecular base-paired structure. However, NASBA in the presence of inosine 5'-triphosphate successfully **amplified** the cRNAs to viroids in total nucleic acid extracts from citrus plants. As sequence specificity of the cRNA to viroids was confirmed by northern analysis, the **amplification** and fidelity of cRNAs are sufficient for the sensitive and specific detection of viroids.

121:28610
TITLE: Method for nucleic acid **amplification** involving ribonucleotide incorporation
INVENTOR(S): Kievits, Tim; Lens, Peter F.; Adriaanse, Henriette M. A.
PATENT ASSIGNEE(S): Akzo N. V., Neth.
SOURCE: Can. Pat. Appl., 12 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2104508	AA	19940225	CA 1993-2104508	19930820
ZA 9306016	A	19940310	ZA 1993-6016	19930817
EP 629706	A2	19941221	EP 1993-202455	19930820
EP 629706	A3	19971217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AU 9344835	A1	19940303	AU 1993-44835	19930823
AU 670804	B2	19960801		
JP 06165699	A2	19940614	JP 1993-207766	19930823
US 5654142	A	19970805	US 1995-403540	19950314
PRIORITY APPLN. INFO.:			EP 1992-202564 A	19920824
			US 1993-110919 B1	19930824

AB An improved method for the **amplification** of nucleic acid is characterized in that ribonucleotides are introduced during **amplification** that weaken normal base pairing. Preferably the ribonucleotides are inosinetriphosphate nucleotides which partly substitute guaninetriphosphate nucleotides normally present in the **amplification** reaction mixture The incorporation of nucleotides, during **amplification**, that weaken normal base pairing prevents the formation of secondary structures in the **amplificate**. The efficiency of the **amplification** is thereby increased. The introduction, during **amplification**, of nucleotides that weaken normal base pairing also results in an improved sensitivity during detection of the **amplified** nucleic acid, when the detection method comprises the hybridization of the **amplified** nucleic acid to a complementary sequence. Part of the hepatitis C virus genome was **amplified** by NASBA using ITP:GTP of 1:3. Results showed that 102 mols. input of nucleic acid **amplified** in the presence of ITP gave a detectable band on gel electrophoresis, whereas nucleic acid **amplified** in the absence of ITP only gave a detectable signal when **amplification** was started with 104 mols. input.

L5 ANSWER 12 OF 16 EMBASE
on STN
ACCESSION NUMBER: 93023457 EMBASE
DOCUMENT NUMBER: 1993023457
TITLE: In vitro recombination and terminal elongation of RNA by Qβ replicase.
AUTHOR: Biebricher C.K.; Luce R.
CORPORATE SOURCE: Max-Planck-Ins Biophysical Chemistry,D-3400 Gottingen, Germany
SOURCE: EMBO Journal, (1992) 11/13 (5129-5135).
ISSN: 0261-4189 CODEN: EMJODG
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
022 Human Genetics
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB SV-11 is a short-chain [115 nucleotides (nt)] RNA species that is replicated by Qβ replicase. It is reproducibly selected when MNV-11, another 87 nt RNA species, is extensively **amplified** by Qβ replicase at high ionic strength and long incubation times. Comparing the sequences of the two species reveals that SV-11 contains an inverse duplication of the high-melting domain of MNV-11. SV-11 is thus a recombinant between the plus and minus strands of MNV-11 resulting in a nearly palindromic sequence. During chain elongation in replication, the chain folds consecutively to a metastable secondary structure of the RNA, which can rearrange spontaneously to a more stable hairpin-form RNA. While the metastable form is an excellent template for Qβ replicase, the stable RNA is unable to serve as template. When initiation of a new chain is suppressed by replacing GTP in the replication mixture by ITP, Qβ replicase adds nucleotides to the 3' terminus of RNA. The replicase uses parts of the RNA sequence, preferentially the 3' terminal part for copying, thereby creating an interior duplication. This reaction is about five orders of magnitude slower than normal template-instructed synthesis. The reaction also adds nucleotides to the 3' terminus of some RNA molecules that are unable to serve as templates for Qβ replicase.